ABSTRACT

[Problem]

Provision of a commercially advantageous method for producing an intermediate which is important for producing the antibacterial and which has a mother nucleus common to the antibacterial, and intermediates produced by such method.

[Means to Solve the Problem]

A method for producing a compound represented by formula (VI):

$$F = \bigcup_{OR^1} \bigcup_{N}^{O} CO_2H$$
 (VI)

which comprises the steps of treating a compound represented by formula (IV):

with a base in the presence of a base to produce a compound represented by formula (V):

$$\begin{array}{c|c}
 & O \\
 & O \\$$

, and hydrolyzing this compound;

a compound represented by formula (II):

; a compound represented by formula (Ia):

$$F \longrightarrow F$$
 (Ia)

; a compound represented by formula (V):

$$F \longrightarrow \bigcap_{OR^1} A \qquad (V)$$

; and a compound represented by formula (VI)

[Selected Drawing]
Non.